

TRAFFIC

The number of registered vehicles in Jackson County for 1990 is 21,527. Forecasting for 2015 has projected the number of vehicles to exceed 28,000. As the number of vehicles increase, it will put a greater strain on the existing road network. Additional traffic volumes will increase safety hazards and congestion. To alleviate traffic congestion, steps must be taken towards building new roads and enhancement of existing facilities.

Vehicle registration has increased at a much greater rate than population since 1940. This increase can be shown best by a graph depicting the change in persons per vehicle ratio over time. This ratio is obtained by dividing the total population of the area by the total number of vehicles registered in that area. **Figure 4** shows this comparison for North Carolina and Jackson County and includes projections to the year 2010.

The results of this figure illustrate the transition from a non-automobile oriented society to one whose vitality is heavily dependent on the automobile. This change in lifestyle has gradually occurred over many years, with the most dramatic difference being between 1940 and 1960. This is primarily due to: the post-depression increase in the standard of living; the increase in population including the post World War II "Baby Boom"; the transition from an agriculturally dominated society to a more diversified one (fewer people on the farm, greater need for transportation); and the availability of automobiles in the 1960's and 1970's and the banking credit to buy them.

On the basis of the forecasted population and motor vehicle registration trends, traffic volumes on most roads in the County should experience a significant increase in traffic during the 1990-2015 design period. Greater increases are to be expected due to continued dramatic increases in tourism and retirement.

In the analysis of historical traffic counts for Jackson County, several primary and secondary road traffic volumes were projected for the design year of 2015. For each location on a given road, Average Daily Traffic (ADT) counts for the past twenty years were used in a linear regression analysis to estimate future ADT counts. Graphical trend lines for each location assisted in the analysis by estimating future ADT counts through a computer generated program.

The counts for each location were then adjusted depending on population growth, registered vehicles, tourism, and the planned development for that area. This step allows for more accurate representation of traffic volumes. **Figure 5** shows the Average Daily Traffic (ADT) volumes for selected locations throughout Jackson County. For each location, present and projected ADT's are shown.